A2

4. (Amended) An optical switch comprising:

an optical-fiber-arraying-member in which a plurality of optical fiber fixing grooves extending along radial directions of a virtual circle are radially formed in a predetermined surface of a base material;

a plurality of array-side optical fibers arrayed in said plurality of optical fiber fixing grooves of said optical-fiber-arraying-member, said array-side optical fibers being arrayed so that end faces thereof are directed along directions opposite to those toward the center axis of said virtual circle;

a moving-side optical fiber having an end thereof selectively optically connected to either of said plurality of array-side optical fibers and positioned on a respective one of said grooves;

wherein said moving-side optical fiber and said optical-fiber-arraying member are rotated relative to each other about a center axis of said virtual circle to select said array-side optical fiber to be optically connected to said moving-side optical fiber.

5. (Amended) An optical switch comprising:

an optical-fiber-arraying-member in which a plurality of optical fiber fixing grooves extending along radial directions of a virtual circle are radially formed in a predetermined surface of a base material;

a plurality of array-side optical fibers arrayed in said plurality of optical fiber fixing grooves of said optical-fiber-arraying-member;

A2

a moving-side optical fiber having an end thereof selectively optically connected to either of said plurality of array-side optical fibers and positioned on a respective one of said grooves;

wherein said moving-side optical fiber and said optical-fiber-arraying member are rotated relative to each other about a center axis of said virtual circle to select said array-side optical fiber to be optically connected to said moving-side optical fiber; and

wherein said base material is of a prism shape, said plurality of optical fiber fixing grooves are radially formed in at least two side faces of said base material, said base material and said moving-side optical fiber are rotated relative to each other about a center axis of the prism to select one side face of said base material, and said moving-side optical fiber is optically connected to either of said array-side optical fibers arrayed on said one side face selected.

A3

7. (Amended) An optical switch comprising:

an optical-fiber-arraying-member in which a plurality of optical fiber fixing grooves extending along radial directions of a virtual circle are radially formed in a predetermined surface of a base material;

a plurality of array-side optical fibers arrayed in said plurality of optical fiber fixing grooves of said optical-fiber-arraying-member;

a moving-side optical fiber having an end thereof selectively optically connected to either of said plurality of array-side optical fibers and positioned on a respective one of said grooves;

A3 Cont

wherein said moving-side optical fiber and said optical-fiber-arraying member are rotated relative to each other about a center axis of said virtual circle to select said array-side optical fiber to be optically connected to said moving-side optical fiber; and

wherein said base material is of a pyramid shape, said plurality of optical fiber fixing grooves are radially formed in at least two side faces of said base material, said base material and said moving-side optical fiber are rotated relative to each other about a center axis of the pyramid to select one side face of said base material, and said moving-side optical fiber is optically connected to either of said array-side optical fibers arrayed on said one side face selected.

A4

11. (Amended) An optical switch comprising:

an optical-fiber-arraying-member in which a plurality of optical fiber fixing grooves extending along radial directions of a virtual circle are radially formed in a predetermined surface of a base material;

a plurality of array-side optical fibers arrayed in said plurality of optical fiber fixing grooves of said optical-fiber-arraying-member;

a moving-side optical fiber having an end thereof selectively optically connected to either of said plurality of array-side optical fibers and positioned on a respective one of said grooves;

wherein said moving-side optical fiber and said optical-fiber-arraying member are rotated relative to each other about a center axis of said virtual circle to select said array-side optical fiber to be optically connected to said moving-side optical fiber; and

wherein said moving-side optical fiber comprises a plurality of optical fibers and each moving-side optical fiber is positioned on said optical-fiber-arraying-member by a pressing member having an arcuate outer periphery and having the same center as said virtual circle.

A4 Cont

12. (Amended) An optical switch comprising:

an optical-fiber-arraying-member in which a plurality of optical fiber fixing grooves are formed along a direction of a generator of a cylindrical side face of a base material, which has one of the cylindrical side surface and part of the cylindrical side surface as its own side face;

a plurality of array-side optical fibers arrayed in said plurality of optical fiber fixing grooves of said optical-fiber-arraying-member; and

a moving-side optical fiber having an end thereof to be selectively optically connected to either of said plurality of array-side optical fibers and positioned on a respective one of said grooves;

wherein said moving-side optical fiber and said optical-fiber-arraying member are rotated relative to each other about a center axis of said cylinder and said moving-side optical fiber is optically connected to said array-side optical fiber.

A5

15. (Amended) An optical switch comprising:

an optical-fiber-arraying-member in which a plurality of optical fiber fixing grooves are formed along a direction of a generator of a conical side face of a base

material, which has one of the conical side face and part of the conical side face as its own side face;

A5 Cont

a plurality of array-side optical fibers arrayed in said plurality of optical fiber fixing grooves of said optical-fiber-arraying-member; and

a moving-side optical fiber having an end thereof to be selectively optically connected to either of said plurality of array-side optical fibers and positioned on a respective one of said grooves;

wherein said moving-side optical fiber and said optical-fiber-arraying member are rotated relative to each other about a center axis of said cylinder and said moving-side optical fiber is optically connected to said array-side optical fiber.

A6

37. (Amended) A method of arraying optical fibers, comprising:

a step of preparing an optical-fiber-arraying-member in which a plurality of optical fiber fixing grooves extending along radial directions of a virtual circle are radially formed in a predetermined surface of a base material;

a step of arraying and fixing a plurality of array-side optical fibers to be optically connected to a moving-side optical fiber, in said plurality of optical fiber fixing grooves, wherein an edge of the moving-side optical fiber is positioned in a respective one of said grooves; and

a step of rotating a cylindrical edge of a cylindrical shape about a center axis of said virtual circle to cut ends of said plurality of array-side optical fibers to align the ends.

A7

40. (Amended) A method of arraying optical fibers, comprising:

a step of preparing an optical-fiber-arraying-member in which a plurality of optical fiber fixing grooves extending along a direction of a generator of a cylindrical side face of a base material, which has one of the cylindrical side face and part of the cylindrical side face as its own side face, are formed in parallel to each other;

a step of arraying and fixing a plurality of array-side optical fibers to be optically connected to a moving-side optical fiber, in said plurality of optical fiber fixing grooves, wherein an edge of the moving-side optical fiber is positioned in a respective one of said grooves; and

a step of rotating a rotary blade having a rotation axis parallel to a center axis of said cylinder and rotating said base material and said rotary blade relative to each other about the center axis of said cylinder, thereby cutting ends of said plurality of array-side optical fibers to align the ends.

41. (Amended) A method of arraying optical fibers, comprising:

a step of preparing an optical-fiber-arraying-member in which a plurality of optical fiber fixing grooves extending along directions of a generator of a conical side face of a base material, which has one of the conical side face and part of the conical side face as its own side face, are formed;

a step of arraying and fixing a plurality of array-side optical fibers to be optically connected to a moving-side optical fiber, in said plurality of optical fiber fixing grooves, wherein an edge of the moving-side optical fiber is positioned in a respective one of said grooves; and

A7 Cont

a step of rotating a rotary blade having a rotation axis parallel to a center axis of said cone and rotating said base material and said rotary blade relative to each other about the center axis of said cone, thereby cutting ends of said plurality of array-side optical fibers to align the ends.

Please add new claims 42 through 44 as follows.

A8

--42. The production method of the optical-fiber-arraying-member according to claim 25, wherein said optical fiber fixing groove formed in said step of forming is V-shaped.

43. A method for producing a member with array-side optical fibers, comprising:

a step of preparing an optical-fiber-arraying-member in which a plurality of optical fiber fixing grooves extending along radial directions of a virtual circle are radially formed in a predetermined surface of a base material;

a step of arraying and fixing a plurality of array-side optical fibers to be optically connected to a moving-side optical fiber, in said plurality of optical fiber fixing grooves; and

a step of cutting ends of said plurality of array-side optical fibers to align the ends;

wherein the member with array-side fibers is applied to an optical switch in which an end of a moving-side optical fiber is positioned on the groove so as to be optically connected to the array-side optical fiber.